

REMARKS

This is a full and timely response to the outstanding final Office Action mailed April 18, 2008. Through this response, no claims have been amended, and claim 32 has been added. Reconsideration and allowance of the application and pending claims 1-7, 12-14, and 32 are respectfully requested.

I. Claim Rejections - 35 U.S.C. § 103(a)

A. Rejection of Claims 1-5 and 12-14; 6; 7

Claims 1-5 and 12-14 have been rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over *Brown* ("*Brown*," U.S. Pat. No. 5,771,435) in view of *Young* ("*Young*," U.S. Pat. No. 4,706,121) and *livonen* ("*livonen*," U.S. Pat. No. 7,246,367). Claim 6 has been rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over *Brown*, *Young*, and *livonen* as applied to claim 5, and further in view of *Haddad* ("*Haddad*," U.S. Pat. No. 5,835,843) and *Fulp* ("*Fulp*," U.S. Pat. No. 6,055,571). Claim 7 has been rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over *Brown*, *Young*, *livonen*, *Haddad*, and *Fulp* as applied to claim 6, and further in view of *Bates* ("*Bates*," U.S. Pat. No. 6,681,396) and *Lawler* ("*Lawler*," U.S. Pat. No. 5,699,107). Applicants respectfully traverse these rejections.

B. Discussion of the Rejection

The M.P.E.P. § 2100-116 states:

Office policy is to follow *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), in the consideration and determination of obviousness under 35 U.S.C. 103. . . the four factual inquires enunciated therein as a background for determining obviousness are as follows:

- (A) Determining the scope and contents of the prior art;
- (B) Ascertaining the differences between the prior art and the claims in issue;
- (C) Resolving the level of ordinary skill in the pertinent art; and

(D) Evaluating evidence of secondary considerations.

In the present case, it is respectfully submitted that a *prima facie* case for obviousness is not established using the art of record.

Independent Claim 1

Claim 1 recites (with emphasis added):

1. A method for accessing a plurality of bi-directional services that are transmitted over a cable television network, comprising:

presenting a program guide to at least one subscriber, the program guide comprising at least one bi-directional service including availability information for each of the at least one bi-directional service, wherein the availability information includes one of available or unavailable;

receiving a request for a bi-directional service displayed in the program guide;

determining a current bandwidth consumption, availability of the requested bi-directional service, and a schedule including bi-directional service rights for each subscriber,

dependent upon the determining step, rendering the bi-directional service, comprising the steps of:

maintaining real-time communications between a supplier of the requested bi-directional service and a requesting subscriber; and
monitoring the real-time communications by a bi-directional services server;

updating a bi-directional services database to reflect that the rendered bi-directional service is one of available or unavailable; and
populating and presenting an updated program guide with the at least one bi-directional service and updated availability information, wherein the at least one bi-directional service is maintained in and periodically updated in the program guide by the bi-directional services database.

Applicants respectfully submit that *Brown* in view of *Young* and *Iivonen* fails to disclose, teach, or suggest at least the above-emphasized claim features. The final Office Action alleges (page 2) the following:

As for claim 1, *Brown* teaches a method for accessing a plurality of bi-directional services that are transmitted over a cable network, comprising: Presenting a program guide to at least one subscriber, the program guide comprising at least one bi-directional service (VoD, NVoD) – col. 4, lines 24-27;

Receiving a request for a bi-directional service displayed in the program guide – col. 4, lines 26-27;

Applicants respectfully disagree. Assuming *arguendo* a VOD or NVOD service can be construed as a bi-directional service, Applicants respectfully submit that to the extent the rejection of claim features at issue are relied on by *Brown*, *Brown* does not disclose, teach, or suggest a **program guide** that provides VOD as an option for selection. The final Office Action refers to col. 4, lines 24-27 of *Brown*, which provides as follows (emphasis added):

Another embodiment of the invention conserves the systems resources by limiting the total number of transmitted VOD versions for all interactive applications. Specifically, instead of maintaining individual limits for the number of transmitted VOD versions of each interactive application, one embodiment of the invention limits the number of transmitted VOD versions of all interactive applications. Consequently, when the number of all transmitted VOD versions reaches its maximum value, this embodiment of the invention determines that additional VOD transmissions would constrain the system resources, and therefore denies VOD requests until one or more of the active VOD sessions terminate.

FIG. 1 presents an interactive communication system 100 used by the invention. This system includes a number of home terminal nodes 105, a communication network 110, a service source 115. As shown in FIG. 1, each home terminal node 105 includes a set-top terminal 120 and a television 125. Each set-top controls the operation of its corresponding television. In particular, through communication network 110, a set-top (1) establishes a communication link between the television viewer and the service source, (2) presents, via the television, selectable programming options provided by the service source to the viewer, and (3) relays program selections from the viewer to the service source.

The summary of the invention section (col. 2, lines 50-58, *Brown*) of *Brown* discloses the following:

One embodiment of the invention initially receives, from a viewing node, a request for a video presentation of a particular interactive application. This embodiment then provides a near-video-on-demand (NVOD) presentation of the interactive application to the viewing node. At the time of the offer of the NVOD presentation, or during the NVOD presentation, the viewing node might request a video-on-demand (VOD) version of the interactive application.

It would appear from the reproduced portion of *Brown* above that the NVOD presentation is arguably presented for selection and a user must request VOD once NVOD is presented for offer. How this request is prompted (e.g., via displayed option in a program guide, barker, dedicated remote control button, etc.) is not described (non-enabling) in *Brown*, and to assume that a VOD option is presented in a program guide is improperly reading more into *Brown* than what is disclosed or suggested. *Brown* has further discussion of this post NVOD presentation request for VOD in col. 6, line 4 – col. 7, line 38, but again, provides no further illumination (or more importantly, enabling disclosure) of the mechanisms for the VOD request. Accordingly, assuming *arguendo* that NVOD and VOD can be construed as bi-directional services, there is nothing in *Brown* that discloses or suggests that VOD is presented in a **program guide** or that there is a request for VOD displayed in the program guide. The relevance of these observations is further explained below in the context of the determining bandwidth and availability features.

With regard to the determining bandwidth/availability features, the final Office Action (page 2) alleges the following:

Determining a current bandwidth consumption, availability of the requested bi-directional service – col. 3, lines 42-50, col. 3, line 60-col. 4, line 15, col. 7, lines 12-21;

Based on the claim language, and assuming *arguendo* that an NVOD option is provided in a program guide, the determination of bandwidth and availability would need to be (for proper claim interpretation) as applied to the NVOD option, not VOD. However, the analysis proffered in the final Office Action is directed to VOD. For instance, col. 3, lines 42-50 of *Brown* appears to refer to the resource constraints for VOD. Similarly, with regard to col. 3, line 60-col. 4, line 15 of *Brown*, discussion is constrained to VOD transmission. Also, col. 7, lines 12-21 of *Brown* is limited to discussion of the subscriber's request for a VOD session. An appropriate rejection would need to read the claim elements consistently

based on the service of NVOD, not a mix of VOD and NVOD. Since there is no disclosure or suggestion in *Brown* of the determining features of claim 1 for NVOD, and to the extent the rejection relies on *Brown* for these claim features, the rejection should be withdrawn.

In addition, the final Office Action attempts to equate VOD and NVOD to bi-directional services. Applicants respectfully submit that this claim construction is inconsistent with Applicants' disclosure of bi-directional services, and hence is not a claim construction one having ordinary skill in the art would reach based on Applicants' disclosure. As set forth in MPEP 2111 (and Federal case law):

The Patent and Trademark Office ("PTO") determines the scope of claims in patent applications not solely on the basis of the claim language, but upon giving claims their broadest reasonable construction "in light of the specification as it would be interpreted by one of ordinary skill in the art." *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364[, 70 USPQ2d 1827] (Fed. Cir. 2004).

For instance, Applicants' disclosure distinguishes bi-directional services from VOD type services on page 2, lines 10 as follows:

Furthermore, the scope of system resource consumption for bi-directional services differs from traditional broadcast services and from recent interactive services, such as video-on-demand, that don't require bi-directional audiovisual communication.

Since the use of VOD and NVOD as alleged equivalents of bi-directional services would not be a reasonable claim construction by one having ordinary skill in the art in view of Applicants' specification, Applicants respectfully submit that the rejection is in error according to MPEP guidelines and well-established Federal case law, and accordingly, the rejection should be withdrawn.

Further, the final Office Action (page 3) admits that *Brown* does not teach "[w]herein the program guide includes availability information of the service," but alleges

that *Young* remedies this deficiency. Applicants respectfully disagree. The final Office Action (page 3) alleges the following:

In an analogous art, *Young* teaches:
Wherein the program guide includes availability information of the service (The program guide displays available listings. For viewers without special decryption service, the system will remove from display those satellite listings which are of no value to the viewer because they are encrypted. In other words, since those listings are unavailable, they are not displayed to the user.

It appears from the final Office Action that ***availability information*** is used somewhat metaphorically, in the sense that a service is determined as available or not based on whether the service identifier appears in the program guide or not. Assuming *arguendo* that proffered interpretation as valid with respect to ***availability information*** in the context of a program guide, Applicants respectfully submit that this claim construction fails (e.g., makes no sense) when applied to the claim features of ***populating and presenting an updated program guide with the at least one bi-directional service and updated availability information***. That is, how does one populate a program guide with the presence or absence of a service? Application of the claim construction proffered by the final Office Action is nonsensical when applied to populating a program guide with an actual component or entity or text, and accordingly, the rejection should be withdrawn.

In addition, the final Office Action acknowledges that *Brown* and *Young* fail to teach determining a schedule including bi-directional service rights for each subscriber, but alleges that *livonen* remedies this deficiency in col. 4, lines 40-44, col. 5, lines 39-54 of *livonen*. Applicants respectfully disagree. *livonen* discloses the following in col. 4, lines 40-44 and col. 5, lines 39-54:

[4/40-44]The channel record can further include other data, such as information as to which subscribers are allowed to control the playback of the recording and the mutual priorities of the said subscribers, for example.

In addition to the databases described above, the server can further include, for example, a billing database for storing various [5/39-54] If a subscriber entitled to control the playback wants to change the status of the playback during the playback process, he or she sends a status command from his or her terminal (step 44). Having received the command, the server checks the rights of the subscriber in question. If the server notices that the subscriber has the right to control the playback, it sends a status message to all terminals (step 45). This message includes the new status information indicating the new position from which the playback is to be continued and the way the playback is to be continued. The terminals can start the playing in response to this message, after a predetermined delay, for example, which ensures that all terminals have moved to the new starting position. Alternatively, the same party that sent the initial start command can send a separate command (step 46) indicating when the playback is to continue from the new position.

Applicants respectfully submit that there is nothing in the above cited portion of *livonen* that discloses, teaches, or suggests determining a ***schedule for each subscriber***.

For at least the reasons set forth above, Applicants respectfully submit that claim 1 is allowable over *Brown* in view of *Young* and *livonen*, and respectfully request that the rejection be withdrawn.

Because independent claim 1 is allowable over *Brown* in view of *Young* and *livonen*, dependent claims 2-5 and 12 are allowable as a matter of law for at least the reason that the dependent claims 2-5 and 12 contain all elements of their respective base claim. See, e.g., *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988).

Independent Claim 13

Claim 13 recites (with emphasis added):

13. A system for accessing a plurality of bi-directional services over a cable television network comprising:

means for receiving availability information from at least one remote supplier related to a plurality of bi-directional services;

means for populating a bi-directional services database with the availability information related to the plurality of bi-directional services;

means for presenting a program guide to a plurality of subscribers, wherein the program guide displays the plurality of bi-directional services along with the availability information;

means for receiving a request from at least one of the plurality of subscribers for at least one available bi-directional service displayed in the program guide;

means for determining a current bandwidth consumption and bi-directional service rights of the requesting subscriber, wherein the bi-directional service rights for a bi-directional service include at least one of a duration, recording rights, start time, end time, bandwidth, and picture quality;

dependent upon the current bandwidth consumption and the bi-directional service rights, means for enabling a bi-directional communication session between at least one of the plurality of subscribers and a remote supplier based on the requested bi-directional service;

means for rendering the available bi-directional service, wherein real-time communications is established between the remote supplier and the at least one of the plurality of subscribers, and wherein the real-time communications between the remote supplier and the at least one of plurality of subscribers is monitored by a bi-directional services server;

means for generating an updated bi-directional services database to reflect that the requested at least one bi-directional service has been rendered and is one of available or unavailable; and

means for retransmitting the program guide including the updated bi-directional services to the plurality of subscribers.

The final Office Action refers to the rejections to claims 1 and 3 to reject claim 13. Although Applicants respectfully submit that claims 1 and 13 are allowable on separate grounds, to the extent that claims 1 and 3 and 13 share common claim features, Applicants respectfully submit that claim 13 is allowable over *Brown* in view of *Young* and *Iivonen* for similar reasons. Accordingly, Applicants respectfully request that the rejection to claim 13 be withdrawn.

Because independent claim 13 is allowable over *Brown* in view of *Young* and *livonen*, dependent claim 14 is allowable as a matter of law.

In addition, Applicants respectfully submit that claim 14 is allowable on separate and independent grounds in addition to the allowance by incorporation of allowable claim features. For instance, the final Office Action (page 8) alleges the following:

As for claim 14, *Brown*, *Young*, and *Ivonen* teach wherein the updated bi-directional services database is updated by information received from the at least one remote supplier (*livonen* teaches when a service is rendered, the billing database is updated to reflect that the service has been rendered – col. 4, lines 44-51).

Applicants respectfully disagree. Col. 4, lines 44-51 of *livonen* provides as follows:

In addition to the databases described above, the server can further include, for example, a billing database for storing various kinds of information relating to billing, such as the billing parameters of each subscriber and/or recording, and for storing the charging records generated in response to the services used. However, since charging does not relate to the actual inventive idea, it is not discussed in more detail here.

The final Office Action (page 4) alleges that the “bi-directional services database” is equivalent to the “database at the headend” that “sends the program guide to the user.” Assuming *arguendo* the alleged equivalent and allegation of the description of the headend database is to be true, it is unreasonable to now equate the database to a billing database. That is, there is no support in the specification of *livonen* (or *Brown*) that a billing database is the same as a program guide database, and indeed, such an interpretation would be unreasonable in view of the state of the disclosures of *livonen* and *Brown*). Accordingly, Applicants respectfully submit that the claim construction proffered by the final Office Action for claim 14 is inconsistent with the interpretation proffered for claim 1, and hence respectfully request that the rejection be withdrawn.

Dependent Claim 6

As set forth above, Applicants respectfully submit that claim 1 is allowable over *Brown* in view of *Young* and *livonen*. Applicants respectfully submit *Haddad* in view of *Fulp* fail to remedy the deficiencies of *Brown* in view of *Young* and *livonen*. For at least the reasons that claim 1 is allowable over *Brown*, *Young*, *livonen*, and *Haddad* in view of *Fulp*, Applicants respectfully submit that claim 6 is allowable as a matter of law. Accordingly, Applicants respectfully request that the rejection be withdrawn.

Dependent Claim 7

As set forth above, Applicants respectfully submit that claim 1 is allowable over *Brown* in view of *Young* and *livonen*. Applicants respectfully submit *Haddad*, *Fulp*, *Bates*, and *Lawler* fail to remedy the deficiencies of *Brown* in view of *Young* and *livonen*. For at least the reasons that claim 1 is allowable over *Brown*, *Young*, *livonen*, *Haddad*, *Fulp*, *Bates*, and *Lawler*, Applicants respectfully submit that claim 7 is allowable as a matter of law. Accordingly, Applicants respectfully request that the rejection be withdrawn.

Official Notice

The final Office Action (page 7) has made the following allegations of Official Notice or well known (location in the Office Action and claim relevance noted in parenthesis):

(Page 7, pertaining to claim 12)...the Examiner takes Official Notice that it is notoriously well known in the art to continuously update the program guide to through the use of a carousel to display availability information. Whatever service(s)/programs are displayed in the program guide, are service(s)/programs that are available.

Applicants respectfully traverse these allegations of Official Notice and submit that the subject matter pertaining to these claims should not be considered well-known.

As provided in MPEP § 2144.03:

Official notice without documentary evidence to support an examiner's conclusion is permissible only in some circumstances. While "official notice" may be relied on, these circumstances should be rare when an application is under final rejection or action under 37 CFR 1.113. Official notice unsupported by documentary evidence should only be taken by the examiner where the facts asserted to be well-known, or to be common knowledge in the art are capable of instant and unquestionable demonstration as being well-known. As noted by the court in *In re Ahlert*, 424 F.2d 1088, 1091, 165 USPQ 418, 420 (CCPA 1970), the notice of facts beyond the record which may be taken by the examiner must be "capable of such instant and unquestionable demonstration as to defy dispute" (citing *In re Knapp Monarch Co.*, 296 F.2d 230, 132 USPQ 6 (CCPA 1961)).

If applicant adequately traverses the examiner's assertion of official notice, *the examiner must provide documentary evidence in the next Office action* if the rejection is to be maintained. See 37 CFR 1.104(c)(2).

Applicants respectfully submit that in the context of the claim language, such a finding of well known art is improper at least given the added complexity associated with such features as described in claims 1 and 12. Further, Applicants respectfully submit that other mechanisms can be used to continually update a guide, and hence it is not obvious to do so with a carousel. To allege otherwise would likely be based on improper hindsight gleaned exclusively from Applicants' disclosure. Accordingly, Applicants traverse the assertions with regard to Official Notice. Because of this traversal, the Office must support its findings with evidence, or withdraw the Official Notice determination.

II. New Claims

As identified above, claim 32 has been added into the application through this response. Applicants respectfully submit that the cited art fails to disclose, teach, or suggest at least “presenting a program guide to at least one subscriber, the program guide comprising at least one bi-directional service including availability information for each of the at least one bi-directional service, wherein the availability information includes one of a user-selectable available option or unavailable option presented in the program guide, the bi-directional service including audio and video communicated between a subscriber and a remote server and a content provider across a hybrid-fiber coax network.” Accordingly, Applicants respectfully submit that claim 32 is allowable over the cited art, and therefore, respectfully request that claim 32 be held to be allowable.

